DOCUMENT RESUME

ED 147 726 CG 012 062

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TITLE A Dose of Kindness: Empathic Arousal and Helping Behavior.
PUB DATE [75]
NOTE 14p.

EDRS PRICE MF-$0.83 HC-$1.67 Plus Postage.
DESCRIPTORS *Arousal Patterns; Behavior Patterns; *Emotional Response; *Empathy; *Helping Relationship; Interpersonal Relationship; Psychological Studies; Research Projects; *Response Mode

ABSTRACT

This paper explores the role of empathic arousal in mediating helping behavior. Undergraduates listened to a recording of a radio newscast that described the situation of a young woman whose parents had been killed in an automobile accident. Subjects were instructed either to imagine how the woman felt about her situation (imagine condition), or to observe the broadcasting techniques (observe condition). Just prior to hearing the newscast, subjects were given a pill (in the context of another experiment) and were told it would either relax them (relax condition) or arouse them (arouse condition). If empathic arousal mediates helping subjects in the image-relax condition, and if they should feel empathic arousal due to the imagine set and not misattribute the arousal to the pill, they should help more than subjects in the other three conditions. This predicted pattern was found. (Author)

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ED147726

# A Dose of Kindness: Empathic Arousal and Helping Behavior

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## Abstract

The role of empathic arousal in mediating helping behavior was explored. Undergraduates listened to a recording of a radio newscast that described the situation of a young woman whose parents had been killed in an automobile accident. Subjects were instructed either to imagine how the woman felt about her situation (imagine condition), or to observe broadcasting techniques (observe condition). Just prior to hearing the newscast, subjects were given a capsule (in the context of another experiment) and were either told it would relax them (relax condition) or arouse them (arouse condition). If empathic arousal mediates helping subjects in the imagine-relax condition, who should feel empathic arousal due to the imagine set and not misattribute the arousal to the pill, should help more than subjects in the other three conditions. This predicted pattern was found.

CG 012062

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A Dose of Kindness: Empathic Arousal as a Mediator of Helping Behavior

Several researchers (Aronfreed, 1968; Batson, Darley, & Coke, in press; Krebs, 1975; Piliavin & Piliavin, 1973) have recently suggested that perceived empathic arousal may be an important mediator of helping behavior. They argue that observing another's distress may create arousal, and if the arousal is labeled (Schachter, 1964) as concern or compassion, it can trigger motivation to reduce the other's distress by helping.

Evidence that empathic arousal mediates helping has been suggestive, though not conclusive. Aderman and Berkowitz (1970) and Aronfreed and Paskal (cited in Aronfreed, 1968) reported results consistent with this hypothesis, but in neither study was arousal actually measured. Krebs (1975) took physiological measures of arousal and found that arousal in response to another's need correlated with helping. Still, even Krebs did not demonstrate a causal link between arousal and helping, only a correlation. Empathic arousal could be a by-product of some other process that causally mediates helping, such as cognitively taking the role of the other (Borke, 1971; Regan & Totten, 1975).

The most convincing evidence that some form of arousal mediates helping comes from a study by Harris and Huang (1973). While subjects performed a mathematics task, a confederate with a bandaged knee limped into the experimental room and tripped over a chair falling to the floor and crying out in apparent pain. Some subjects were induced to misattribute arousal caused by

this incident to an aversive noise being broadcast during the math task; others were not. Harris and Huang reasoned from Schachter's (1964) theory of emotion that if arousal motivates helping, it should do so only when attributed to a victim's plight. As predicted, subjects induced to misattribute their arousal to the aversive noise offered less help to the confederate than did subjects not so induced.

Although Harris and Huang's results suggest that arousal mediated helping, the need situation they used makes it unclear whether the mediating arousal was empathic. As Piliavin and Piliavin (1973) have noted, arousal in a face-to-face emergency may be of several sorts: startle, shock, fear, disgust, curiosity, as well as empathy. Nonempathic arousal might have mediated helping by subjects in Harris and Huang's study.

The present research was undertaken to test more clearly the hypothesis that empathic arousal is a causal mediator of helping. In a 2 X 2 factorial design subjects listened to a tape recording of a radio newscast. The newscast presented the situation of a young college senior, Katie Banks, who had recently lost her parents in a tragic automobile wreck. Subjects were instructed either to imagine how Katie felt about her situation (imagine condition), or to observe the broadcasting techniques used in the newscast (observe condition). Just prior to hearing the newscast subjects were given a capsule (in the context of another experiment) and were either told it would relax them (relax condition) or arouse them (arouse condition). After subjects heard the newscast, they were unexpectedly given an opportunity to offer Katie help.

Following Stotland (1969), it was assumed that subjects in the imagine conditions would be more empathically aroused by the newscast than would subjects in the observe conditions. Subjects in the imagine-arouse condition, however, should have had an adequate explanation for their arousal; they had just taken a capsule that would arouse them. Thus only subjects in the imagine-relax condition should both experience arousal and attribute that arousal to the newscast. Based on the assumption that empathic arousal mediates helping, it was predicted that subjects in the imagine-relax condition should offer more help to Katie than subjects in any of the other three conditions. The amount of help offered was not expected to differ among the latter three conditions.

## Method

### Subjects

Subjects were 44 University of Kansas undergraduates enrolled in an introductory psychology course. Participation partially fulfilled a course requirement. Eleven subjects were assigned to each of four experimental conditions by a randomized block procedure.

### Procedure

Upon arrival, subjects were seated in an individual cubicle and provided with tape-recorded instructions. Instructions outlined two studies. The first concerned the effect of a drug, norephren, on short-term memory. To test the effect, subjects would perform two memory tasks; one before taking norephren and one after

taking and totally absorbing the drug. Subjects were told it would take about 25 minutes to absorb the drug completely. A communications study, totally unrelated to the memory study, was being run during the waiting period. The communications study concerned the impact of certain types of newscasts on listeners.

Attribution of arousal manipulation. Instructions next directed subjects' attention to two informed consent statements. The statement for the memory study contained the attribution of arousal manipulation. Subjects in the relax condition read that norephren produced a reaction of mild relaxation or calmness prior to its total absorption. The effects would occur within 5 minutes after ingestion and disappear within 20 minutes. Subjects in the arouse condition read the same message except "arousal or tenseness" was substituted for "relaxation or calmness".

After signing the consent statements, subjects completed a brief memory task. The experimenter then gave subjects a norephren capsule (actually powdered milk). Before administering the capsule, the experimenter asked subjects to read carefully and then sign a "Statement of Knowledge Concerning Norephren". The statement reiterated the attribution of arousal manipulation.

After subjects ingested the capsule, the experimenter pointed out written instructions for the second study. Instructions informed subjects that they would listen to a tape recorded newscast (actually bogus) provided by the local University radio station and then rate it on a number of dimensions. Subjects were told the newscast had not been aired, because it was received too late

to be scheduled.

Manipulation of observational set. Observational set was manipulated by varying the written instructions for the communications study. Subjects in the imagine condition were instructed to imagine how the person described in the newscast felt about the situation and not to try to identify the techniques used to make the newscast seem more warm and personal. Subjects in the observe condition were instructed to do just the opposite.

Since both experimental manipulations were embedded in typewritten forms, the experimenter remained blind to experimental conditions.

Need situation. Subjects next played a recording of an emotionally arousing newscast. A male announcer described the situation of Katie Banks, a senior at the University. Katie's parents had recently been killed in a tragic automobile crash. Katie's father did not have life insurance, and Katie was desperately struggling to support her surviving younger brother and sister while she finished her last semester of college. Katie badly needed money, but she also needed transportation to the grocery store, laundry, etc., and sitters to stay with her younger brother and sister while she attended her two night classes. The announcer then interviewed Katie. Katie, in a grief-stricken voice, indicated that her major concern was graduating so that she could find a good enough job to be able to support her brother and sister. Without a good job she would have to give up the children.

When subjects finished listening to the newscast, the experimenter brought them a questionnaire designed to assess reactions to it. He also presented subjects with a letter from Katie Banks, explaining that since Katie had given permission to use the newscast in the study, the professor in charge of the research wanted to do something for her. Katie's letter was an appeal to subjects to help her by donating time to babysit, etc. Before leaving, the experimenter gave subjects an envelope and a slip of paper on which they could indicate how many hours, if any, they wished to contribute to help Katie. Subjects were asked to leave the envelope in the cardboard box sitting on their desk even if they did not wish to help. The box already contained two sealed envelopes.

Dependent Measures

The major dependent measure was amount of time volunteered. Subjects also responded to questionnaire items designed to check the effectiveness of the experimental manipulations. They rated the extent to which they attempted to imagine the feelings of the person described (1) or observe the broadcast techniques (9). On a separate form subjects indicated the effect they had expected the norephren capsule to produce, from extreme relaxation (1) to extreme tenseness (9).

## Results and Discussion

Effectiveness of the Manipulations. Analyses of subjects' responses to the manipulation checks indicated that both manipulations were effective. On each item, only the relevant main effect was significant in the predicted direction ($p$'s < .001).

No other effects were significant.

Helping Responses. Inspection of Table 1 reveals that subjects' helping behavior conformed fairly closely to the predicted pattern. Data on the number of hours volunteered failed to meet the homogeneity of variance assumption of the analysis of variance model (Bartlett-Box $F = 5.47$, $p < .001$); therefore, a log transformation was performed. Unless otherwise noted, all analyses are of the transformed data.

A planned comparison contrasting the imagine-relax condition with the other three was used to test the prediction that more help would be offered in the imagine-relax condition. The contrast was highly significant, $F$ (1, 37) = 9.78, $p < .005$. The residual between-group variation was not significant, $F$ (2, 37) = 1.24.

Paired comparisons of individual means provided further support for the predicted pattern of results. The imagine-relax group differed significantly in the predicted direction from the observe-relax group, $t$ (37) = 1.70, $p < .05$, one-tailed [1]; from the imagine-arouse group, $t$ (37) = 2.94, $p < .003$, one-tailed; and from the observe-arouse group, $t$ (37) = 3.03, $p < .002$, one-tailed. The other groups did not differ significantly from one another.

Correlational analyses using the untransformed data also supported the experimental predictions. In the imagine-relax condition there was a significant negative correlation between the amount of arousal subjects expected norephren to produce and the amount of help volunteered ($r = -.76$, $p < .005$, one-tailed); in

the other conditions this correlation was positive ($.14 \leq r's \leq .38$). This pattern of correlations is entirely consistent with the proposed relationship between empathic arousal, causal attribution for that arousal, and helping.

To conclude, results supported the hypothesis that empathic arousal mediates helping. Subjects helped more when they both focused attention upon the victim's plight and were not led to misattribute arousal generated by the victim's need. Focusing upon the plight did not, by itself, increase helping. Perception that one was aroused as a result of the victim's need was also necessary. Apparently, a causal link does exist between perceived empathic arousal and helping.

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## Footnote

[1]Subjects in the observe-relax group actually offered somewhat more help, relative to the two arouse groups, than had been expected. The great majority of the help in this condition (25 of 32 total hours), however, was offered by two subjects who were uncharacteristic relative to other subjects in the condition. For one of these subjects, who volunteered 10 hours, theobservational set manipulation failed. He indicated that he had attempted to imagine Katie's feelings rather than observing broadcast techniques, a unique response in the observe-relax condition. The other subject said during debriefing that she had recently witnessed a motorcycle accident in which a person was seriously injured. The bystanders had seemed apathetic and uncaring to her and, even though she was not the first person at the scene, she had been the first to help by calling an ambulance. She felt experience influenced her response to Katie's need.

Table 1

Mean Number of Hours Volunteered by Subjects

| Observational Set | Potential Side Effect of the Drug | |
|---|---|---|
| | Relaxation | Arousal |
| Imagine | 5.20 | .70 |
| | (8/11) | (3/11) |
| Observe | 2.91 | .70 |
| | (5/11) | (3/11) |

Note. The numerators of the fractions in parentheses indicate the number of subjects in a given condition who offered some help. The denominators indicate the number of subjects in a given condition. Three subjects, one in each condition except the observe-relax condition, indicated they would help Katie, but did not specify the number of hours. The responses of these subjects were included in the above representation of the number of subjects per condition offering some help; they were not, of course, included in the calculation of the mean number of hours volunteered or in inferential analyses of the continuous measure of helping.

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